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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,854	08/08/2004	David W. Burns	DWB002	4853
45827	7590	01/18/2006	EXAMINER	
DAVID W. BURNS 15770 RICA VISTA WAY SAN JOSE, CA 95127			LIANG, REGINA	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/710,854	<b>Applicant(s)</b> BURNS, DAVID W.	
	<b>Examiner</b> Regina Liang	<b>Art Unit</b> 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

29

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6, 8, 10-13, 15, 16, 18, 20, 21, 23, 26-32, 35-39 are rejected under 35

U.S.C. 102(b) as being anticipated by Ogawa (US. PAT. NO. 6,100,538).

As to claims 1, 31, Ogawa discloses a system (Figs. 1, 16 for example) for determining a stylus position of a stylus (2), comprising: a telemetric imager (detecting unit 3R, 3L); and a controller (circuit component 8 as shown in Fig. 2 constitutes processor means) electrically coupled to the telemetric imager (processor means incorporated in the detecting unit 3R and 3L; see col. 7, lines 27-28, 47-51); wherein the controller determines the stylus position based on a generated image of a stylus tip from a first direction (from detecting unit 3L) and a generated image of the stylus tip from a second direction (from detecting unit 3R) when the stylus tip is in a stylus entry region (col. 7, lines 27-39 for example).

As to claim 2, Ogawa teaches the stylus comprises a pointer (col. 1, line 9).

As to claims 3, 8, 10, Fig. 1 of Ogawa teaches a writable medium (1) in the stylus entry region.

As to claim 4, Ogawa teaches the stylus includes a writing-mode imaging target near a writing end of the stylus (detecting the writing end touches on the plane 1, which reads on a writing-mode imaging target as claimed).

As to claim 6, Ogawa teaches the telemetric imager comprises two optical imaging arrays (linear image sensors 13 as shown in Fig. 2 both detecting units 3L, 3R).

As to claim 11, Fig. 22 of Ogawa teaches a light source (31) positioned near the telemetric imager (3), wherein light emitted from the light source illuminates the stylus tip when the stylus tip is in the stylus entry region.

As to claims 12, 13, Ogawa teaches the light source comprising LED (col. 10, lines 12-13).

As to claim 15, Fig. 23 of Ogawa teaches an optical filter (39) positioned between the telemetric imager and the stylus, and the optical filter preferentially passes light from the stylus tip to the telemetric image.

As to claim 16, Figs. 1, 21, 24 of Ogawa teaches a communication port connected to the controller to enable communication between the controller and a digital computing device (5).

As to claim 18, Ogawa teaches the telemetric imager and the controller are contained in a housing (see Fig. 2).

Claim 20 is a method claim corresponding to the above apparatus claim 1, is rejected for the same reasons as stated above since such method "steps" are clearly read on by the corresponding "means".

As to claim 21, Ogawa teaches the telemetric imager comprises two optical imaging arrays (linear image sensors 13 as shown in Fig. 2 both detecting units 3L, 3R).

As to claims 23, 32, Fig. 22 of Ogawa teaches illuminating the stylus tip with a light source (31) when the stylus tip is in the stylus entry region.

Art Unit: 2674

As to claims 26, 27, 35, 36, Ogawa teaches determining angular information of the stylus (angle or rotation of the stylus) when the stylus tip is in the entry region (col. 7, lines 27-32).

As to claims 28, 37, Fig. 1 of Ogawa teaches a writable medium (1) in the stylus entry region.

As to claims 29, 38, Fig. 1 of Ogawa teaches sending the determined stylus position to a digital computing device (personal computer 5).

As to claims 30, 39, Ogawa teaches interpreting the determined stylus position (col. 7, lines 34-39).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 25, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa in view of Brown et al (US. PAT. NO. 4,430,526 hereinafter Brown).

Ogawa does not disclose the stylus includes an erasing mode image target near an erasing end of the stylus. However, Figs. 2 and 3 of Brown teaches a stylus (30) has a writing mode near writing end of a stylus (32), an erasing mode near an erasing end of the stylus (31). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the stylus of Ogawa to have an erasing mode as taught by Brown so as to provide pointing device which is capable of performing writing and erasing operation.

5. Claims 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa in view of Griffin (US. PAT. NO. 4,553,842).

Ogawa does not disclose using one optical imaging array to generate the image of the stylus tip from the first and second directions. However, Fig. 2 of Griffin teaches using one optical imaging device to generate image of the input pointer from the first and second directions (detector assembly 28, col. 4, lines 5-26). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ogawa to use one optical imaging detector as taught by Griffin so as to provide an optical position locating apparatus of simple low cost, easily maintained rugged construction (col. 2, lines 60-62 of Griffin).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa in view of Wood et al (US. PAT. NO. 6,414,673 hereinafter Wood).

Ogawa does not disclose the writable medium comprising a sheet of paper. However, Wood teaches a stylus entry region comprising a sheet of paper (e.g. col. 11, lines 10-24). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the writable medium of Ogawa to have a sheet of paper as taught by Wood since this allows the user to draw or write on the writable medium such that both an electronic copy and a hardcopy is available as a record to the user at the same time.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa in view of McDermott et al (US. PAT. NO. 5,635,683 hereinafter McDermott).

Art Unit: 2674

Figs. 1, 21, 24 of Ogawa teaches a communication port connected between the controller and a digital computing device (5). Ogawa does not explicitly disclose the communication port is one of a wired port or a wireless port. However, McDermott teaches a controller (processor 18 in Fig. 1) connected to a digital computing device (host computer 16) via a wire or wireless link (e.g. col. 9, lines 48-51). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ogawa to use a wire or wireless communication link for connecting the controller and the computing device so as to readily transmit information from the controller to the computing device.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa in view of Yoshida et al (US. PAT. NO. 5,401,917 hereinafter Yoshida).

Ogawa does not disclose a stylus holder formed within the housing and receives the stylus for stylus storage. However, Fig. 1 of Yoshida teaches a housing of pen input device having a stylus holder (3) formed within the housing and receives the stylus (5) for stylus storage. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Ogawa to have a stylus holder as taught by Yoshida so as to allow stylus to be easily inserted and extracted thereto the therefrom and the stylus being held in a stable manner when inserted inside (col. 1, lines 13-15 of Yoshida).

9. Claims 14, 24, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa in view of Badyal et al (US. PAT. NO. 6,151,015 hereinafter Badyal).


Art Unit: 2674

Ogawa teaches a controllable light source positioned near the telemetric image (see Fig. 22), and a first set of images of the stylus tip from the first direction and the second direction are generated with the light source on, and wherein a second set of images of the stylus tip from the first direction and the second direction are generated with the light source off. Ogawa also teaches using the first set of images and the second set of image to determine the stylus position (col. 11, lines 11-35). Ogawa does not disclose comparing the first set of images and the second set of images to determine the stylus position. However, Badyal teaches a computer pointing device comprising optical sensor for capturing images, the newly captured image is compared with previously captured image to determine the stylus position (col. 4, lines 14-20). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Ogawa to have a comparator as taught by Badyal to ascertain the direction and amount of movement.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard, can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Regina Liang  
Primary Examiner  
Art Unit 2674

1/11/06